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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,488	11/01/2001	Rainer Bindig	CERA 234	4569
24972	7590 02/27/20	03		
FULBRIGH	IT & JAWORSKI,	EXAMINER		
666 FIFTH A NEW YORK	VE		AGUIRRECHEA, JAYDI A	
		,	ART UNIT	PAPER NUMBER
			2024	

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.		Applicant(s)	
	10/016,488		BINDIG ET AL.	L
Office Action Summary	Examiner		Art Unit	
•	Jaydi A. Aguirred	chea	2834	
The MAILING DATE of this communication ap				ldress
Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut - Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). Status	136(a). In no event, how by within the statutory mine will apply and will expire the application to the appl	ever, may a reply be tin nimum of thirty (30) day SIX (6) MONTHS from to become ABANDONE	nely filed s will be considered time the mailing date of this of D (35 U.S.C. § 133).	ly. communication.
1) Responsive to communication(s) filed on 01	November 2001 .			
2a) ☐ This action is FINAL . 2b) ☑ TI	his action is non-f	inal.		
3) Since this application is in condition for allow closed in accordance with the practice under Disposition of Claims				ne merits is
4)⊠ Claim(s) 27-52 is/are pending in the applicati	ion.			
4a) Of the above claim(s) is/are withdra		ration.		
5) Claim(s) is/are allowed.				
6)⊠ Claim(s) <u>27-52</u> is/are rejected.				
7) Claim(s) is/are objected to.				
8) Claim(s) are subject to restriction and/o	or election require	ement.		
Application Papers				
9) The specification is objected to by the Examino				
10)⊠ The drawing(s) filed on <u>01 November 2001</u> is/a				
Applicant may not request that any objection to the	= : :	· ·		
11) The proposed drawing correction filed on If approved, corrected drawings are required in re			oved by the Examil	ier.
12) The oath or declaration is objected to by the E.		Alon.		
Priority under 35 U.S.C. §§ 119 and 120				
13)⊠ Acknowledgment is made of a claim for foreig	an priority under 3	5 U.S.C. § 119(a	a)-(d) or (f)	
a)⊠ All b)□ Some * c)□ None of:	, p		-, (-, -, (-,	
1. Certified copies of the priority documen	nts have been rec	eived.		
2. Certified copies of the priority documen			ion No	
Copies of the certified copies of the price application from the International Beautiful See the attached detailed Office action for a lise.	ority documents h ureau (PCT Rule	ave been receive 17.2(a)).	ed in this Nationa	l Stage
14) Acknowledgment is made of a claim for domes		•		al application).
 a) The translation of the foreign language pr 15) Acknowledgment is made of a claim for domes 	• •			
Attachment(s)	•			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	4) 5) 6)	-	y (PTO-413) Paper No Patent Application (P	

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DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

2. Figures 1, 2 and 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program

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listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a).

"Microfiche Appendices" were accepted by the Office until March 1, 2001.)

- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (i) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).
- 4. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.
- 5. The abstract of the disclosure is objected to because:
 - Numerals 3, 4 and 8 in page 1 of the specification are referred as external electrodes, while in page 2, lines 17-20 are referred as metallization, reinforcing layers and joining layer, respectively.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 27-52 are rejected under 35 U.S.C. 103(a) as being obvious over Bindig et al. (US 6208026).

Bindig et al. disclose a piezoelectric actuator (1) having external electrodes (6) composed of a layer of metallization (4), having a joining layer (7).

However, it fails to disclose the basic metallization with discontinuities or recesses.

Takeuchi et al. teach the discontinuities for the purpose of preventing the deterioration of a frequency characteristic in a piezoelectric vibrator.

It would have been obvious to one skilled in the art at the time the invention was made to use the discontinuities disclosed by Takeuchi on the actuator disclosed by Binding for the purpose of preventing the deterioration of a frequency characteristic in a piezoelectric vibrator.

- 7. With regards to claim 28 and 29, the combination described above discloses the claimed invention where the metallization is formed by a mechanical process.
- 8. With regards to claims 30 and 34-40 the combination described above discloses the claimed invention except for the claimed ranges. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the optimum ranges as claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPO 233.
- 9. With regards to claims 31-33, the combination as described above discloses the claimed invention. (Column 3, Lines 38-67)

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10. With regards to method claims 43-52, it has been held that to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. Ex parte Pfeiffer, 1962 C.D. 408 (1961).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaydi A. Aguirrechea whose telephone number is 703-305-2277. The examiner can normally be reached on M-Th 9-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-1341 for regular communications and 703-305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JAA February 19, 2003 NESTOR RADAREZ
SUPERVISORY FUTURIT EXAMINER
TECHNOLOGY GENTER 2800